



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/612,013	07/03/2003	Je-Chang Jeong	Q76450	5445
7590 12/16/2004				
SUGHRUE, MION, ZINN, MACPEAK & SEAS				
2100 Pennsylvania Avenue, N.W.				
Washington, DC 20037				
EXAMINER				
LE, VU				
ART UNIT		PAPER NUMBER		
2613				

DATE MAILED: 12/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/612,013

Applicant(s)

JEONG ET AL.

Examiner

Vu Le

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 10-49 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 10-49 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☒ Certified copies of the priority documents have been received in Application No. 08/024,305.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>7-3-2003</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Nonstatutory Double Patenting***

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 10-25, 34-41 are rejected under the judicially created doctrine of double patenting over claims 17-32, 48-55 of U. S. Patent No. 6,680,975 since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Claim 10 is covered by claim 17 of patent '975;

Claims 11-18 are covered by claims 18-25 of patent '975;

Claims 19-25 are covered by claims 26-32 of patent '975;

Claims 34-41 are covered by claims 48-55 of patent '975.

The difference is the same for the four groups, so the reasoning for claim 10 applies to the rest respectively. Claim 10 and claim 17 of patent '975 are nearly

Art Unit: 2613

identical except claim 10 excludes recitation of the phrase "wherein the selected scanning patterns produces the most efficient coding according to a predetermined criterion" in which claim 17 of patent '975 includes. A cursory analysis indicates that claim 10 is slightly broader than claim 17 without the mentioned phrase. However, within the context of both claims as a whole, one skilled in the art would have recognized that different scanning patterns during coding produce different coding efficiencies, and selecting one over the other implies that it is being selected because it yields the most efficient coding. Since "selecting" a scanning pattern is included in both claims, claim 10 would have implied that the selected scanning pattern would have resulted the most efficient coding even without the inclusion of the above-mentioned phrase. Thus, the lack of the above-mentioned phrase in claim 10 would not alter its scope to warrant a distinct and independent invention from claim 17 of patent '975.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

3. Claims 11-14, 16-18 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 57-60, 62-64 of copending Application No. 10/609,438. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

Claim 11 is nearly identical to claim 57 ('438) except it also calls for "reordered coefficients" whereas claim 57 ('438) does not call for that. A cursory analysis indicates that claim 57 ('438) is slightly broader than claim 11 without the mentioned phrase. However, within the context of both claims as a whole, one skilled in the art would have recognized that by selecting a scanning pattern from a plurality of scanning patterns, the "reordering" of coefficients would have been implied and obvious. Since "selecting" a scanning pattern is included in both claims, claim 57 ('438) would have implied that the selected scanning pattern would have resulted in the "reordering" of coefficients even without the inclusion of the above-mentioned phrase. Thus, the inclusion of the phrase "reordered coefficients" into claim 11 would not alter its scope to warrant a distinct and independent invention from claim 57 ('438). Dependent claims 12-14, 16-18 are identical to dependent claims 58-60, 62-64 ('438).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

4. Claims 19-21, 23-25 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 65-67, 69-71 of copending Application No. 10/609,438. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

The reasoning is the same as discussed in paragraph 3 above.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 2613

5. Claims 34-37, 39-41 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 80-83, 85-87 of copending Application No. 10/609,438. Although the conflicting claims are not identical, they are not patentably distinct from each other because:

The reasoning is the same as discussed in paragraph 3 above.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### ***Statutory Double Patenting***

6. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain a patent therefor ..." (Emphasis added). Thus, the term "same invention," in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

A statutory type (35 U.S.C. 101) double patenting rejection can be overcome by canceling or amending the conflicting claims so they are no longer coextensive in scope. The filing of a terminal disclaimer cannot overcome a double patenting rejection based upon 35 U.S.C. 101.

7. Claims 26-33, 42-49 are rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 33-40, 56-63 of prior U.S. Patent No. 6,680,975. This is a double patenting rejection.

As a group, claims 26-33 are the same as claims 33-40 of patent '975;

As a group, claims 42-49 are the same as claims 56-63 of patent '975.

Both groups share the same characteristics, and will be discussed jointly.

Independent claim 26 is the same as independent claim 33 of patent '975 except for the slight difference in terminology. In the present application, claim 26 recites "a scanning

Art Unit: 2613

mode signal indicating the selected scanning pattern" whereas claim 33 in patent '975 recites "a pattern signal indicating the selected scanning pattern". Although claim 26 calls for a "mode signal" whereas claim 33 ('975) calls for a "pattern signal", both signals are the same since both represent a signal that indicates the selected scanning pattern. The only difference is in terminology. Thus, claim 26 and claim 33 ('975) drawn to identical subject matter. The claims dependent on claim 26 are identical with respect to the claims dependent on claim 33 ('975). Claims 42-49 drawn to identical subject matter as claims 56-63 ('975) for the same reason as discussed in the first group.

8. Claims 11-14, 16-18 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 17-20, 22-24 of copending Application No. 10/609,438. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

9. Claims 19-21, 23-25 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 25-27, 29-31 of copending Application No. 10/609,438. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

10. Claim 26 is provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claim 72 of copending Application No. 10/609,438. This is a

Art Unit: 2613

provisional double patenting rejection since the conflicting claims have not in fact been patented.

Claim 26 is the essentially the same as claim 72 ('438) except for slight difference in terminology. Claim 26 calls for "spatial frequency coefficients having been reordered from an original order according to a scanning pattern" whereas claim 72 ('438) calls for "spatial frequency coefficients having been changed from a state according to a scanning pattern". Although claim 26 calls for "reordered" whereas claim 72 ('438) calls for "changed from a state", both mean the same since a change from a state of spatial frequency coefficients is a change from the original state, and a change from one state to another is in fact reordering. Thus, claims 26 and 72 ('438) drawn to identical subject matter.

11. Claims 34-37, 39-41 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 40-43, 45-47 of copending Application No. 10/609,438. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.

12. Claims 42-45, 47-49 are provisionally rejected under 35 U.S.C. 101 as claiming the same invention as that of claims 88-91, 93-95 of copending Application No. 10/609,438. This is a provisional double patenting rejection since the conflicting claims have not in fact been patented.



Claim 42 is the essentially the same as claim 88 ('438) except for slight difference in terminology. Claim 42 calls for "spatial frequency coefficients having been **reordered** from an original order according to a scanning pattern" whereas claim 88 ('438) calls for "spatial frequency coefficients having been **changed from a state** according to a scanning pattern". Although claim 42 calls for "reordered" whereas claim 88 ('438) calls for "changed from a state", both mean the same since a change from a state of spatial frequency coefficients **is** a change from the original state, and a change from one state to another is in fact reordering. Thus, claims 42 and 88 ('438) drawn to identical subject matter. The dependent claims are respectively identical.

13. Claims 1-9 have been canceled as directed by Preliminary Amendment filed July 3, 2003.

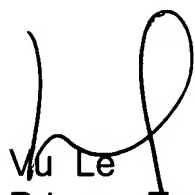
### **Contact**

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Le whose telephone number is 703-308-6613. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2613

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Vu Le  
Primary Examiner  
AU 2613  
(703) 308-6613  
Vu.Le@uspto.gov